AMCC STORAGE

3ware® Sidecar

High-Performance Hardware RAID Storage for PC and Apple Workstations

AMCC's 3ware Sidecar is an external RAID solution which expands the storage capacity of PCs, the Apple Mac Pro and Power Mac G5 (PCI Express version). It includes a high performance 4-port PCI Express to SATA II Hardware RAID controller, a 4-bay desktop enclosure with chassis control and a Multi-lane high bandwidth SATA cable.

SERIAL ATA 3Gb/s

Highlights

- 4-bay SATA enclosure for multiple terabytes of desktop storage
- True hardware RAID protection for all your valuable data
- RAID levels 0, 1, 5, 10 and JBOD
- StorSwitch™ non-blocking switch fabric for maximum controller throughput
- StreamFusion optimizes RAID 5 disk accesses to maximize application performance under heavy loads
- Fault indication, status LEDs
- Support for hot swappable drives
- Complete RAID management and configuration suite
- BBU (battery backup unit) support
- Broad OS support *(see back for listing)*

How Much is 3TB?

Data	Quantity
Movies	3,000
Digital Photos	600,000
Songs	1,000,000
Spreadsheets	30,000,000

Movie = 1GB
Digital Photo = 5MB
Song = 3MB
Spreadsheet = 100KB

Think Outside the Box

The 3ware® Sidecar featuring true hardware RAID is the only external storage choice for PCs, Apple® Mac Pro and Power Mac® G5 when capacity, performance, data protection, and ease of use are the goals.

It offers superior performance under heavy loads, stellar storage capacity, and uncomplicated connectivity. Importantly, your data will be RAID protected because a failed drive can mean the loss of hours of irreplaceable creative output.

The 3ware Sidecar delivers multiple terabytes of desktop storage for music files, audio and video editing applications, high-end graphics, and all your other capacity hungry applications.

Broad OS support and an easily configurable RAID controller teamed with an intuitive management suite, and Multi-lane connectivity make the 3ware Sidecar as easy to use as 1-2-3.

True Hardware RAID

The easy to install 3ware 9650SE-4LPME SATA II to PCI Express RAID controller can deliver over 200MB/s RAID 5 reads and RAID 5 writes.

This industry-leading performance is driven by dedicated RAID processors which manage I/O functions. Your workstation's system CPU is free to manage your vital audio, video, and applications for optimized overall system performance.

The 3ware switch fabric architecture provides the performance, availability, and fault tolerance demanded by cutting edge digital content creators.

Take it to the Desktop

AMCC's 4-bay external desktop storage enclosure provides up to 3TB of additional capacity when loaded with easily sourced 750GB SATA II, 3Gb/s drives. SATA II hard drives are hot swappable and each has its own dedicated channel to the 3ware SATA II RAID controller via a two meter Multi-lane SATA cable.

Enclosure management features include fault indicators and status LEDs, event notification, user configurable audio alarms, and Chassis Control via I^2C for up-to-the-second feedback.

Get Connected via the Multi-lane™ Expressway

AMCC's award winning Multi-lane high bandwidth SATA connection system is fast, secure, simple, and clutter free. It combines the RAID controller's four SATA ports into a single locked connection. Four lanes of high speed SATA traffic travel through just one cable from the RAID controller, which resides inside the workstation, to the four drives in the 3ware Sidecar enclosure.

Store and Protect Piles of Data

The 3ware Sidecar is a powerful SATA RAID desktop storage solution for PCs and Apple workstations. Whether on the set, in your studio, or at the office, the 3ware Sidecar allows you to always think outside the box, never having to worry about running out of capacity or losing data because of a failed drive.

APPLICATIONS FOR 3WARE CONTROLLERS

Workstations | Pro Video | High-End Graphics | Pro Audio

3ware Sidecar

3ware Sidecar Features

- True hardware RAID
- RAID levels 0, 1, 5, 10 and JBOD
- Exclusive StorSwitch™ high performance architecture
- Up to 3TB capacity*
- 128MB DDR2 533 memory with ECC protection
- Complete configuration management suite
  - — 3DM® Scout (Mac only)
  - — 3ware Disk Manager 2 (3DM®2)
  - — Command Line Interface (CLI)
- BBU Support
- Hot-swap and hot-spare support for easy maintenance
- Dynamic sector repair for robust data protection
- S.M.A.R.T. disk drive monitoring for reliability
- Front panel LED status indicators
- Online Capacity Expansion and RAID Level Migration
- Drive insertion and removal notification
- RoHS compliant (lead free)

** Using easily sourced 750GB SATA drives (not included)*

SATA II vs. Firewire

SATA II offers significantly faster transfer speeds, better scalability, and improved cabling options than Firewire and USB interfaces. See the below table.

Interface	Interface Speed
SATA II	3Gb/s (300MB/s)
Firewire 800	800Mb/s (80MB/s)
Firewire 400	400Mb/s (40MB/s)
USB 2.0	480Mb/s (48MB/s)

Note: These interfaces use 8b/10b encoding

Hardware vs. Software RAID

All AMCC 3ware RAID controllers incorporate on-board processors to deliver true hardware RAID. Software RAID schemes use the system's processor, exploit host memory, potentially compromise reliability and rob the host system's valuable CPU cycles just to process RAID calculations.

Operating System Support

- Microsoft Windows 2003/XP/2000 (32/64-bit)
- Microsoft Windows Vista (32/64-bit)
- Red Hat Linux, SuSE Linux, Fedora Core (32/64-bit)
- Linux Kernels 2.4, 2.6 (32/64-bit)
- FreeBSD (32/64-bit)
- Mac OS X (G5: 10.4.6+, Mac Pro: 10.4.8)

  For complete OS listing, go to: **www.3ware.com/support/OS-support**

3ware Sidecar Minimum System Requirements

- Apple Mac Pro, Power Mac G5 or PC workstation
- Available PCI Express slot (x4 minimum)
- Supported operating system

  Note: Power Mac G5 with PCI-X is not supported

3ware 9650SE RAID Controller Specifications

- Low profile form factor
- 4-port configuration
- PCI Express X4
- Serial ATA 2.6 Specification support
- Operating Temperature: 0˚C to 50˚C
- Power Requirements: 3.5–10W @ 3.3V (depending on configuration)

3ware RDE-400-XSATA Enclosure Specifications

- 4-bay external Serial ATA desktop enclosure
- 2m SFF-8088 Multi-lane cable
- Chassis Control Unit for enclosure management via I^2C
- Universal switching power supply 90V – 240V
- Hot swappable drive carriers

Dimensions

- 9650SE-4LPME controller 7.8"L x 2.92"H (19.8cm x 7.4cm)
- RDE-400-XSATA enclosure 12.75"L x 6.75"H x 7.00"W (32.385cm x 17.145cm x 17.780cm)

Service and Support

- 3-year warranty on the 9650SE-4LPME
- 1-year warranty on the RDE-400-XSATA
- Support via the web at **www.3ware.com/support**
- For latest hard drive compatibility listing go to: **www.3ware.com/products/compatibility_sata.asp**

3ware Sidecar Accessories

- CBL-SFF8088-20M 2m Multi-lane cable
- I^2C Cable Enclosure management cable
- RDE-TRAY-01 Spare drive tray

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3waresales@amcc.com
www.3ware.com
www.amcc.com

Sales Offices for 3ware Products:

USA:	+1-877-883-9273
	+1-408-542-8771
Europe:	+44-161-232-6360
Asia/Pacific:	+65-6826-3381
Japan:	+0800-123-9273
China:	+86-10-6581-4916